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(54) Title: ARABIDOPSIS THALIANA DERIVED FRIGIDA GENE CONFERRING LATE FLOWERING

1 MSNYPPTVAA QPTTTANPLL QRHQSEQRRL ELPKIVETES TSM DITIGQS
51 KQPQFLKSID ELAAPSVAVE TFKRQFDDLQ KHIESIENAI DSKLESNGVV
101 LAARNNNFHQ PMLSPPRNNV SVETTIVTSQ PSQEIVPETS NKPEGGRMCE
151 LMCSKGLRKY IYANISDQAK LMEEIPSALK LAKEPAKFVL DCIGKFYLLG
201 RRAFTKESPM SSARQVSLLI LESFLIMPDR GKGKVKIESW IKDEAETAAV
251 AWRKRLMTEG GLAAAEKMDA RGLLLLVA CF GVP SNFRSTD LLDLIRMSG S
301 NEIAGALKRS QFLVPMVSGI VESSIKRGMH IEALEMVYTF GMEDKPSAAL
351 VLTSFLKMSK ESFERAKRKA QSPLAFKEAA TKQLAVLSSV MQCMETHKLD
401 PAKELPGWQI KEQIVSLEKD TLQLDKEMEE KARSLSLMEE AALAKRMYNQ
451 QIKRPRLSPM EMPPTVSSSY SPIYDRSFP QRDDDDQDEI SALVSSYLGP
501 STSFPHRSRR SPEYMVPLPH GGLGRSVYAY EHLAPNSYSP GHGHLHRQY
551 SPSLVHGQRH PLQYSPPIHG QQQLPYGIQR VYRHSPSEER YLGLSNQRSP
601 RSNSSLDPK

(57) Abstract: Disclosed are isolated nucleic acids obtainable from the FRI locus of plants which encode polypeptides capable of specifically altering, particularly delaying, the flowering time of a plant into which the nucleic acid is introduced. One preferred embodiment is the FRI nucleotide sequence which encodes the polypeptide of Fig 6 (see the sequence of Fig 5, particularly bases 362-2188 thereof) or sequences degeneratively equivalent to these. Also provided are variant sequences (e.g. alleles, orthologues, derivatives) and complementary sequences, plus vectors, host cells, plants and associated processes of production and methods of use e.g. for influencing or affecting flowering time in a plant by expression or suppression of FRI or variant sequences.

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